

APPLICANT(S): PARAMESH, Jeyanandh et al.
SERIAL NO.: 10/608,544
FILED: June 30, 2003
Page 2

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AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

1. (Currently Amended). An antenna receiver coupled to two or more antennas, the antenna receiver comprising:

~~two or more antennas to receive modulated radio frequency (RF) signals; and
an antenna receiver coupled to said two or more antennas, the antenna receiver including at least one antenna weighted value generator to provide an antenna weighted value to said modulated radio frequency (RF) signals received from said two or more antennas,~~

~~wherein said at least one antenna weighted value generator is able to generate said antenna weighted value by manipulating a first value derived from an amplitude of the modulated radio frequency (RF) signals and a second value derived from a phase of the modulated radio frequency (RF) signals.~~

a radio frequency (RF) section which includes a first antenna weighted value generator to output a pair of first real and first imaginary antenna weighted radio frequency (RF) signal components, a second antenna weighted value generator to output a pair of second real and second imaginary antenna weighted radio frequency (RF) signal components, a first adder to combine the first and second real radio frequency (RF) signal components, and a second adder to combine the first and second imaginary radio frequency (RF) signal components;

a radio frequency (RF) to intermediate frequency (IF) quadrature downconverter to receive a combined antenna weighted radio frequency (RF) real signal from said first adder and a combined antenna weighted radio frequency (RF) imaginary signal from said second adder, and to output an in-phase portion and a quadrature portion of an intermediate frequency (IF) signal; and

an intermediate frequency (IF) to baseband downconverter operably coupled to said radio frequency (RF) to intermediate frequency (IF) quadrature downconverter,

APPLICANT(S): PARAMESH, Jeyanandh et al.
SERIAL NO.: 10/608,544
FILED: June 30, 2003
Page 3

to downconvert said in-phase portion and said quadrature portion of said intermediate frequency signal to an in-phase portion and a quadrature portion of a baseband signal.

2. (Currently Amended). The ~~apparatus~~ antenna receiver of claim 1, wherein at least one of the first and second antenna weighted value generators comprises:

a first variable amplifier to adjust an amplitude of the modulated radio frequency (RF) signals and to output amplitude adjusted modulated radio frequency (RF) signals; and

second and third variable amplifiers operably coupled to the first amplifier, to adjust the phase of the amplitude adjusted modulated radio frequency (RF) signals,

wherein said at least one of the first and second antenna weighted value generators is able to generate said antenna weighted value by manipulating a first value derived from an amplitude of the modulated radio frequency (RF) signals and a second value derived from a phase of the modulated radio frequency (RF) signals.

3. (Currently Amended). The ~~apparatus~~ antenna receiver of claim 2, wherein the second variable amplifier is able to provide a real portion of the phase of the antenna weighted value and the third variable amplifier is able to provide an imaginary portion of the phase of the antenna weighted value.

4. (Canceled).

5. (Canceled).

6. (Canceled).

7. (Canceled).

8. (Canceled).

APPLICANT(S): PARAMESH, Jeyanandh et al.
SERIAL NO.: 10/608,544
FILED: June 30, 2003
Page 4

9. (Canceled).

10. (Canceled).

11. (Currently Amended). An apparatus comprising:

two or more dipole antennas to receive two or more modulated radio frequency (RF) signals; and

an antenna receiver coupled to said two or more antennas, wherein the antenna receiver ~~including~~includes: at least two antenna weighted value generators to provide antenna weighted values to the two or more modulated radio frequency (RF) signals received at the two or more antennas, respectively;

~~wherein at least one of said two or more antenna weighted value generators is able to generate a first antenna weighted value based on a manipulation of a first value derived from an amplitude of the two or more modulated radio frequency (RF) signals and a second antenna weighted value derived from a phase of the two or more modulated radio frequency (RF) signals.~~

a radio frequency (RF) section having a first antenna weighted value generator to output a pair of first real and first imaginary antenna weighted radio frequency (RF) signal components, a second antenna weighted value generator to output a pair of second real and second imaginary antenna weighted radio frequency (RF) signal components, a first adder to combine the first and second real radio frequency (RF) signal components, and a second adder to combine the first and second imaginary radio frequency (RF) signal components;

a radio frequency (RF) to intermediate frequency (IF) quadrature downconverter to receive a combined antenna weighted radio frequency (RF) real signal from said first adder and a combined antenna weighted radio frequency (RF) imaginary signal from said second adder, and to output an in-phase portion and a quadrature portion of an intermediate frequency (IF) signal; and

an intermediate frequency (IF) to baseband downconverter operably coupled to said radio frequency (RF) to intermediate frequency (IF) quadrature

APPLICANT(S): PARAMESH, Jeyanandh et al.

SERIAL NO.: 10/608,544

FILED: June 30, 2003

Page 5

downconverter, to downconvert said in-phase portion and said quadrature portion of said intermediate frequency signal to an in-phase portion and a quadrature portion of a baseband signal.

12. (Currently Amended). The apparatus of claim 11, wherein said at least one antenna weighted value generator of the first and second antenna weighted value generators comprises:

a first variable amplifier to adjust an amplitude of the modulated radio frequency (RF) signals and to output amplitude adjusted modulated radio frequency (RF) signals; and

second and third variable amplifiers operably coupled to the first variable amplifier, to adjust the phase of the amplitude adjusted radio frequency (RF) signals;

wherein said at least one antenna weighted value generator is able to generate said antenna weighted value by manipulating a first value derived from an amplitude of the modulated radio frequency (RF) signals and a second value derived from a phase of the modulated radio frequency (RF) signals.

13. (Previously Presented). The apparatus of claim 12, wherein the second variable amplifier is able to provide a real portion of the phase of the antenna weighted value and the third variable amplifier is able to provide an imaginary portion of the antenna weighted value.

14. (Canceled).

15. (Canceled).

16. (Canceled).

17. (Currently Amended). A communication system comprising:

APPLICANT(S): PARAMESH, Jeyanandh et al.
SERIAL NO.: 10/608,544
FILED: June 30, 2003
Page 6

a first communication device to transmit a plurality of modulated radio frequency (RF) signals over a plurality of channels;

a second communication device to receive the plurality of modulated radio frequency (RF) signals by a plurality of antennas operably coupled to an antenna receiver, wherein the antenna receiver comprises:

a radio frequency (RF) section which includes a first antenna weighted value generator to output a pair of first real and first imaginary antenna weighted radio frequency (RF) signal components, a second antenna weighted value generator to output a pair of second real and second imaginary antenna weighted radio frequency (RF) signal components, a first adder to combine the first and second real radio frequency (RF) signal components, and a second adder to combine the first and second imaginary radio frequency (RF) signal components;

a radio frequency (RF) to intermediate frequency (IF) quadrature downconverter to receive a combined antenna weighted radio frequency (RF) real signal from said first adder and a combined antenna weighted radio frequency (RF) imaginary signal from said second adder, and to output an in-phase portion and a quadrature portion of an intermediate frequency (IF) signal; and

an intermediate frequency (IF) to baseband downconverter operably coupled to said radio frequency (RF) to intermediate frequency (IF) quadrature downconverter, to downconvert said in-phase portion and said quadrature portion of said intermediate frequency signal to an in-phase portion and a quadrature portion of a baseband signal.

~~having a radio frequency (RF) section to provide antenna weighted values to the modulated radio frequency (RF) signals and to produce antenna weighted radio frequency (RF) signals, a radio frequency (RF) to an intermediate frequency (IF) quadrature downconverter to downconvert the antenna weighted radio frequency (RF) signals to an antenna weighted intermediate frequency (IF) signal, and an intermediate frequency (IF) to baseband downconverter to downconvert said antenna weighted intermediate frequency (IF) signal to an antenna weighted baseband signal.~~

APPLICANT(S): PARAMESH, Jeyanandh et al.
SERIAL NO.: 10/608,544
FILED: June 30, 2003
Page 7

18. (Currently Amended). The communication system of claim 17, ~~the radio frequency (RF) section of the antenna receiver comprises:~~

~~a plurality of antenna weighted value generators operably coupled to the plurality of antennas and wherein at least one~~ [[an]] antenna weighted value generator of the plurality first and second of the antenna weighted value generators is able to provide an antenna weighted value to the plurality of modulated radio frequency (RF) signals based on a manipulation of a first value derived from an amplitude of a received modulated radio frequency (RF) signal received by an antenna of the plurality of antennas and a second value derived from a phase of the received modulated radio frequency (RF) signal.

19. (Canceled).

20. (Currently Amended). The communication system of claim ~~[[19]]~~ 17, wherein the radio frequency ~~(RF)~~ to an intermediate frequency ~~(IF)~~ quadrature downconverter of the antenna receiver is able to provide said in-phase portion and ~~[[a]]~~ said quadrature portion of ~~[[an]]~~ said intermediate frequency signal.

21. (Previously Presented). The communication system of claim 20, wherein the intermediate frequency to a base band frequency downconverter of the antenna receiver is able to provide a real portion and an imaginary portion of a base band frequency signal.

22. (Canceled).

23. (Canceled).

24. (Canceled).